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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,895	08/23/2002	Laurent Biettron	0512-1024	8930

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EXAMINER

LIANG, GWEN

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,895

Applicant(s)

BIETTRON ET AL.

Examiner

GWEN LIANG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01272006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to communications through the applicant's Preliminary Amendment, filed on 03/25/2002.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features in claims 14-26 with the corresponding labeling must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "50" has been used to designate both a process symbol in Figure 1 and a document symbol in Figure 3. Since the same reference character "50" is used to reference two different flowchart symbols (one for a process and the other for a document), it causes confusion. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

The word "thermatic" (Preliminary Amendment, page 2, paragraph 2, line 4) contains a typographical error.

Appropriate correction is required to be made to the aforementioned and any other informalities existing in the disclosure.

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4. The abstract of the disclosure is objected to because of the following defects:

The title of the application should not be included in the Abstract.

The use of "This method" (beginning of line 1) should be changed to "A method"

Correction is required. See MPEP § 608.01(b).

5. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106 IV.B.2.(b)

A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. Schrader, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts.

Claims 14-21 in view of the above cited MPEP sections, are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts. The use of a computer has not been indicated.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 14-21, 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "A method of thematically classifying documents" in claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the frequency" in page 3 line 24 and page 4, line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "frequency" is not exactly found in any of the preceding features in the claim.

In claim 14, the claimed subject matter "characteristic representative of the relevance" (page 3, line 11) renders the claim indefinite because it is unclear to the examiner how a characteristic can be representative of a relevance, which is normally a measurement.

Claim 22 is similarly rejected based on the reasons given for claim 14.

Claim 14 recites the limitation "the downloaded documents" in page 3 line 16 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "downloaded documents" is not exactly found in any of the preceding features in the claim.

In claim 14, the claimed subject matter "said identification"" (page 3 line 13) renders the claims indefinite because there is an "identifying" step in page 3 line 1 and page 3 line 6 respectively and therefore it is unclear which "identifying" step is considered to be its antecedent.

Claim 16 recites the limitation "the values" in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim. The limitation "values" is not exactly found in any of the preceding features in the claim or those in the parent claim 14.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al. "Wilbur", (Article title "An analysis of statistical term strength and its use in the indexing and retrieval of molecular biology texts").

With respect to claim 22, Wilbur discloses a module ...comprising:

a central processor unit having means for comparing elements with elements characteristic of various themes (See page 209, Abstract and Introduction, wherein it is inherent that a central processor unit is involved in measuring the strength of terms

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against the subject of each document, which is equivalent to the themes of each document, paragraph 1; page 217, section 6, paragraph 1; page 218, (1) LLSF)

each element being allocated a coefficient representative of the relevance of said element for a corresponding theme (See page 209, Abstract; page 221, section 7, paragraph 1),

and means for calculating the value of at least one characteristic representative of the relevance of a theme for the document on the basis of the coefficients of said characteristic elements that the document contains, in order to decide whether or not the document relates to said theme (See page 209, Abstract; page 219, paragraphs 1-3),

said central unit being connected to means for storing documents classified by theme that can be interrogated on the basis of themes contained in a request (See page 209, Abstract; page 212, page 216 last line – page 217, line 3; page 217 Table 1),

and the module has means for calculating the frequency of the element in the selected documents relating to the theme (See page 209, Abstract; page 210, paragraph 2, “The page begins ...based on strength”; page 217 Table 1),

means for calculating the frequency of the element in the selected documents that do not relate to the theme (See page 209, Abstract; page 210, paragraph 2, “The page begins ...based on strength”; page 217 Table 1; page 221, paragraph 1),

and means for calculating the ratio between the calculated frequencies (See page 219 Figure 2 and formula labeled (18);. page 210, paragraph 2, “The page begins ...based on strength”).

Wilbur does not explicitly teach “elements extracted from each document”.

However, the teaching of this limitation is obvious in Wilbur (Abstract. Firstly, “terms” in Wilbur are analogous to “elements” as claimed. Secondly, Wilbur teaches the measurement of strength of terms in relation to the subjects of documents. It is obvious that terms have to be extracted from documents to form a base collection of terms before the term strengths can be measured (i.e. comparing elements with elements characteristic of subjects of documents).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to extract elements from each document in the module for thematically classifying documents as taught by Wilbur, in order for the importance of these elements to be measured in describing the content of the documents in which they occur (page 209, Abstract). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 23 is rejected for the reasons set forth hereinabove for claim 22 and furthermore Wilbur discloses a module to determine which themes are contained in a request formulated by a user (See page 212, paragraph 1).

Claim 24 is rejected for the reasons set forth hereinabove for claim 22 and furthermore Wilbur discloses a module for determining which themes are contained in pages downloaded from a computer network or in a request formulated by a user, and for filtering downloaded documents to ban consultation of pages relating to one or more predetermined themes (See page 211-213, section 3, “Term Strength”; page 217, paragraph 1; page 218, paragraph 1).

Claim 25 is rejected for the reasons set forth hereinabove for claim 22 and furthermore Wilbur discloses a module to determine which themes are contained in a request formulated by a user and for generating user profiles on the basis of the themes to which the request relates (See page 211-213, section 3, "Term Strength"; page 217, paragraph 1; page 218, paragraph 1).

Claim 26 is rejected for the reasons set forth hereinabove for claim 22 and furthermore Wilbur discloses a search engine for documents on a computer network (See page 212, paragraph 1; page 216 last line – page 217, line 3), the engine comprising an indexing module for creating and updating thematic databases on the basis of documents downloaded from the computer network (See page 209, Abstract; page 212, page 216 last line – page 217, line 3; page 217 Table 1), and a module for interrogating thematic databases adapted to supply the references of documents corresponding to a request that has been input thereto, the search engine further comprising a thematic classification module according to claim 22 associated with the indexing module (Article title "An analysis of statistical term strength and its use in the indexing and retrieval of molecular biology texts").

Claim 14 is rejected for the reasons set forth hereinabove for claim 22 and furthermore Wilbur discloses a method comprising the following steps:

manually and/or automatically selecting a sample of documents representative of each theme (See page 217, paragraph 1; page 218, paragraph 3, "(1) LLSF..." and paragraph 4, "(2) Expert Network..."; page 219, paragraph 1);

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said identification and calculation steps being performed automatically for each document downloaded from a computer network (page 216, paragraph 3, "Currently ...

The data of Table 1 are taken from our in-house on-line system used in a network form of Entrez..."; and

automatically classifying the downloaded documents as a function of the themes with which they deal.

Claim 15 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Wilbur discloses a method comprising the step of automatically sorting themes in a theme tree structure in decreasing order of coefficients (See page 209, section 1, paragraph 2).

Claim 16 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Wilbur discloses a method wherein the step of automatically calculating the characteristic representative of the relevance of the theme of a document for classification comprises the following steps, for each theme:

reading the value of the ratio of said frequencies for each theme-representing element extracted from the document; multiplying together the values as read; and allocating the result of this multiplication to the value of said characteristic (See page 219 Figure 2 and formula labeled (18);. page 210, paragraph 2, "The page begins ...based on strength").

Claim 17 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Wilbur discloses a method wherein it is automatically decided that the document relates to a theme if the value of said characteristic: representative of the

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relevance of the theme for said document is greater than a threshold value (See page 213, paragraph 2, "It remains ...above a set threshold...even though they do not qualify for some other reason"; page 213, section 4, paragraph 5, "A method of calculating...using the threshold method...")

Claim 18 is rejected for the reasons set forth hereinabove for claim 17 and furthermore Wilbur discloses a method wherein the threshold value for each theme is automatically determined on the basis of said frequency ratios using the following relationship:

$$\text{score} - \text{threshold}_{\text{theme}} = (R_{\text{mean}}) \text{ theme_n}$$

in which:

$\text{score} - \text{threshold}_{\text{theme}}$ designates the threshold value;

R_{mean} represents the mean value of the frequency ratios R of the elements of the theme; and

theme_n designates a predetermined number

(See page 211-213, section 3, "Term Strength").

Claim 19 is rejected for the reasons set forth hereinabove for claim 17 and furthermore Wilbur discloses a method wherein the threshold value is adjusted manually (page 214, last paragraph – page 215, paragraph 1).

Claim 20 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Wilbur discloses a method wherein the steps of automatically identifying theme-characterizing elements contained in a document: and for each theme are performed by means of a hashing table (See page 217 Table 1).

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Claim 21 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Wilbur discloses a method wherein for each vocabulary element of a request formulated by a user, coefficients are automatically calculated characteristic of the element relative to each known theme, and each element is associated with the corresponding themes and coefficients, so that said coefficients reach a minimum value (See page 213, section 4 – page 217, line 3).

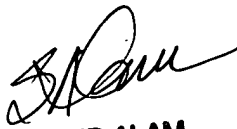
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 12:00 P.M. - 8:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

14 February 2005
G.L.


SHAHID ALAM
PRIMARY EXAMINER